

What is Claimed is:

1. A bituminous water vapor retarder membrane having a multi-layer core comprising an aluminum sheet laminated between a pair of thermoplastic sheets, said core being laminated to at least one fabric sheet impregnated with asphalt.
2. The membrane of Claim 1 wherein the thermoplastic sheets are polyester.
3. The membrane of Claim 1 wherein the aluminum sheet and the thermoplastic sheets are laminated together with a low density polyethylene to form a core.
4. The membrane of Claim 1 wherein the said core is laminated between a pair of fabrics at least one of which is impregnated with asphalt.
5. The membrane of Claim 4 wherein one of the fabrics is asphalt saturated felt.
6. The membrane of Claim 4 wherein the other fabric of the pair of fabrics is a fiberglass scrim.
7. The membrane of Claim 6 wherein the fiberglass scrim is impregnated with asphalt.
8. The membrane of Claim 1 wherein a coating of asphalt is used to adhesively secure said core to said one fabric.
9. The membrane of Claim 2 wherein said polyester sheets are a polyethylene terephthalate.

10. The membrane of Claim 8 wherein each outer surface of the core is treated with an adhesion promoter and is adhesively secured to said fabric by asphalt.
11. A membrane of Claim 2 wherein said polyester sheets are treated with an adhesion promoter.
12. The membrane of Claim 10 wherein the adhesion promoter comprises a coating selected from the group of an acrylic coating, cross linked copolymers of methacrylic acid ester and glycidyl acrylate, methacrylate, and a copolymer of acrylonitrile and styrene
13. The membrane of Claim 10 wherein the adhesion promoter is a physical plasma or corona surface treatment.
14. A bituminous water vapor retarder membrane having a core comprising an aluminum sheet, said core being laminated to at least one fabric sheet impregnated with asphalt.
15. In a multi-layer vapor retarder having a pair of fabric sheets at least one of which is impregnated with asphalt, a core sandwiched between and adhesively secured to said fabric sheets, said core comprising an aluminum foil sheet adhesively secured between a pair of polyester sheets and secured thereto by means of a low density polyethylene adhesive, said sheets having an acrylic coating on their exterior surfaces.
16. A method of retarding the migration of water vapor from the underlying support surface to an overlying concrete slab, said method comprising placing a multi-layer bituminous membrane on said supporting surface, said membrane comprising a multi-

layer core comprising an aluminum sheet laminated between a pair of thermoplastic sheets, said core being laminated to at least one fabric sheet impregnated with asphalt, and constructing a concrete slab over and in contact with said membrane.